

IN THE CLAIMS:

Please amend the claims to read as the following:

Claim 1 (Original): A method for supplying a power to a liquid crystal display,
comprising the steps of:

reducing a power source voltage from a system; and

supplying the reduced power source voltage to digital circuit devices for
processing digital signal.

Claim 2 (Previously Presented): The method for supplying a power to a liquid crystal
display according to claim 1, wherein the power source voltage from the system is over
3.0V.

Claim 3 (Previously Presented): The method for supplying a power to a liquid crystal
display according to claim 1, wherein the reduced power voltage is under 3.0V.

Claim 4 (Previously Presented): The method for supplying a power to a liquid crystal
display according to claim 1, further comprising the step of:

raising or reducing the power source voltage from the system to generate voltage
to be supplied to the liquid crystal panel.

Claim 5 (Currently Amended): A method for supplying a power to a liquid crystal display, comprising the steps of:

taking a power source voltage less than 3.0V from a system.

supplying the power source voltage to digital circuit devices including an interface circuit, a timing controller, a data driving circuit, and a gate driving circuit for processing digital signal, wherein the interface circuit includes a low voltage differential signaling receiver which lowers a voltage level of the signals input from the system to thereby reduce the number of signal lines needed to the system and the timing controller.

Claim 6 (Previously Presented): The method for supplying a power to a liquid crystal display according to claim 5, further comprising the steps of:

raising or reducing the power source voltage from the system to generate voltage to be supplied to the liquid crystal panel.

Claim 7 (Previously Presented): An apparatus for supplying a power to a liquid crystal display, comprising:

a voltage reducing circuit for reducing a power source voltage from a system; and

a digital circuit device for conducting digital signal driven by the reduced power source voltage.

Claim 8 (Previously Presented): The apparatus for supplying a power to a liquid crystal display according to claim 7, wherein the power source voltage input from the system is over 3.0V.

Claim 9 (Previously Presented): The apparatus for supplying a power to a liquid crystal display according to claim 7, wherein the reduced power source voltage is under 3.0V.

Claim 10 (Previously Presented): The apparatus for supplying a power to a liquid crystal display according to claim 7, further comprising a DC-DC converter for raising or reducing the power source voltage from the system to generate the raised or the reduced voltage to be supplied to the liquid crystal panel.

Claim 11 (Previously Presented): The apparatus for supplying a power to a liquid crystal display according to the claim 7, wherein the digital circuit device comprising:

- an interface circuit for receiving a synchronous signal, a clock signal and digital video data from the system;

- a data driving circuit for supplying the digital video data to the liquid crystal panel;

- a gate driving circuit for supplying a scan pulse to the liquid crystal panel; and

- a timing controller for controlling the data driving circuit and the gate driving circuit by using the synchronous signal and the clock signal from the interface circuit.

Claim 12 (Previously Presented): The apparatus for supplying a power to a liquid crystal display according to claim 10, wherein the DC-DC converter generates a VDD voltage over 6V, a gamma reference voltage generated by voltage-dividing the VDD voltage, and VCOM voltage of 2.5 to 3.3V.

Claim 13 (Previously Presented): The apparatus for supplying a power to a liquid crystal display according to claim 7, wherein the voltage reducing circuit includes:

- an output switching device;

- a control signal generator for generating a control signal to the output switching device; and

- a pulse width modulator for modulating the duty ratio of the control signal.

Claim 14 (Previously Presented): The apparatus for supplying a power to a liquid crystal display according to claim 7, wherein the voltage reducing circuit includes:

- an output switching device;

- a control signal generator for generating a control signal to the output switching device; and

- a pulse frequency modulator for modulating the frequency of the control signal.

Claim 15 (Previously Presented): The apparatus for supplying a power to a liquid crystal display according to claim 7, wherein the voltage reducing circuit includes:

a regulator for reducing the power source voltage from the system based on the comparison of the predetermined reference voltage and the output voltage.

Claim 16 (Previously Presented): The apparatus for supplying a power to a liquid crystal display according to claim 7, wherein the voltage reducing circuit includes:

a resistor for voltage-dividing the power source voltage from the system.

Claim 17 (Previously Presented): The apparatus for supplying a power to a liquid crystal display according to claim 7, wherein the voltage reducing circuit includes:

a capacitor for charging and discharging the power source voltage from the system.

Claim 18 (Currently Amended): An apparatus for supplying a power to a liquid crystal display comprising:

a system for generating a power voltage under 3.0V; and

digital circuit devices including an interface circuit, a timing controller, a data driving circuit, and a gate driving circuit used to process the digital signal by taking the power voltage, wherein the interface circuit includes a low voltage differential signaling receiver which lowers a voltage level of the signals input from the system to thereby reduce the number of signal lines needed to the system and the timing controller.

Claim 19 (Previously Presented): The apparatus for supplying a power to a liquid crystal display according to claim 18, further comprising a DC-DC converter for raising or reducing the power source voltage to generate the raise or the reduced voltage to be supplied to the liquid crystal panel.

Claim 20 (Previously Presented): The apparatus for supplying a power of a liquid crystal display according to claim 18, wherein the digital circuit devices include:

an interface circuit for receiving a synchronous signal, a clock signal and digital video data from the system;

a data driving circuit for supplying the digital video data to the liquid crystal panel;

a gate driving circuit for supplying a scan pulse to the liquid crystal panel; and

a timing controller for controlling the data driving circuit and the gate driving circuit by using the synchronous signal and the clock signal from the interface circuit.

Claim 21 (Previously Presented): The apparatus for supplying a power to a liquid crystal display according to claim 19, wherein the DC-DC converter generates a power supply voltage over 6V, gamma reference voltages generated by voltage-dividing the power supply voltage, and a common voltage.